

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Final Office Action dated May 16, 2007 has been received and its contents carefully reviewed.

By this Amendment, Applicants have amended claims 1 and 29, and cancelled claims 2, 5-7, 19, 30, 33, 34 and 47 without prejudice or disclaimer. Accordingly, claims 1, 3, 8-18, 20-29, 31, 35-46 and 48-58 are currently pending. Reexamination and reconsideration of the pending claims is respectfully requested.

In the Office Action, claims 1-3, 5, 7-22, 24, 26, 29-31, 33, 35-50, 52, 54 and 57 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5,608,556, issued to Koma et al. (hereafter "Koma"), in view of US Patent No. 6,139,926, issued to Auman et al. (hereafter "Auman"). Claims 27-28 and 55-56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Koma in view of Auman, further in view of US Patent No. 5,757,455, issued to Sugiyama et al. (hereafter "Sugiyama"). Claims 6 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koma in view of Auman, further in view of Koma and SID 1995 ("No-Rub Multi-Domain TFT Using Surrounding-Electrode Method," SID, 1995, pages 869-872). Claims 23 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koma in view of Auman, further in view of US Patent No. 6,141,074, issued to Bos et al. (hereafter "Bos"). Claims 51 and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koma in view of Auman, further in view of US Patent No. 5,936,692, issued to Van De Witte. (hereafter "Van De Witte"). These rejections are respectfully traversed and reconsideration is requested.

Claim 1 is allowable over the cited references at least in that claim 1 recites a combination of elements including, for example, "an L-shaped thin film transistor at an intersection of one of said gate and data bus lines" and "a storage electrode connected to said pixel electrode via a contact hole and overlapped with said gate line so as to form a storage capacitor", "wherein the photo-alignment layer includes a material selected from the group consisting of PSCN (polysiloxane-cinnamate) and CelCN (cellulosecinnamate) based compounds". None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention.

Claim 29 is allowable over the cited references at least in that claim 29 recites a combination of elements including, for example, “an L-shaped thin film transistor at an intersection of one of said gate and data bus lines” and “a storage electrode connected to said pixel electrode via a contact hole and overlapped with said gate line so as to form a storage capacitor”, “wherein the photo-alignment layer includes a material selected from the group consisting of PSCN (polysiloxane-cinnamate) and CelCN (cellulosecinnamate) based compounds”. None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention.

In the present invention, the storage electrode (43) overlaps with the gate line (1) to form a storage capacitor, so the storage electrode (43) of the present invention is not in the pixel region. See Fig. 6. But in Koma, the storage electrode (22) is overlapped with the pixel electrode (17) to surround the pixel electrode (17) to form a storage capacitor, so the storage electrode (22) of Koma is in the pixel region. Accordingly, the present invention may increase a pixel aperture in proportion to an area of the storage electrode to be overlapped with the gate line.

Also, in the present invention, the storage electrode connects to the pixel electrode (13) via a contact hole (39) to supply the pixel signal. But in Koma, the storage electrode connected to the special line perpendicularly from the data line to supply the common signal. Accordingly, in Koma, a parasitic capacitance is formed between the data line and the special line, but the present invention reduces the parasitic capacitance because the special line of Koma is unnecessary in the present invention.

Also, in the present invention, the photo-alignment layer includes a material selected from the group consisting of PSCN (polysiloxane-cinnamate) and CelCN (cellulosecinnamate) based compounds. But, in the Sugiyama, the photo-alignment layer includes PVCN (polyvinyl cinnamate). Therefore, none of the cited references teaches or suggests material of the photo-alignment layer of the present invention.

Accordingly, Applicants respectfully submit that claim 1 and claims 1, 3, 8-18 and 20-28, which depend therefrom, and claim 29 and claims 31, 35-46 and 48-58, which depend therefrom, are allowable over the cited references.


Applicants believe the application is in condition for allowance and early, favorable action is respectfully solicited. If for any reason the Examiner finds the application other than in

condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: **15 August 2007**

Respectfully submitted,

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